



March 20, 2006

**EX PARTE SUBMISSION**

***Electronic Filing***

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW, Room TW-A325  
Washington, D.C. 20554

Re: AU Docket No. 06-30

Dear Ms. Dortch:

On March 17, 2006, Tom Sugrue and Kathleen Ham of T-Mobile USA, Inc. (“T-Mobile”), accompanied by Peter Cramton, Professor of Economics of the University of Maryland, met with Leslie Marx, Chief Economist of the Federal Communications Commission (“FCC”) and Evan Kwerel of the Office of Strategic Planning & Policy Analysis. The purpose of the meeting was to discuss the appropriate information policy for the upcoming AWS auction. This ex parte letter summarizes the concepts and suggestions discussed during that session.

In particular, the attendees discussed the proposal put forth previously by T-Mobile and Professor Cramton,<sup>1</sup> which suggested that the FCC’s decision to apply a non-transparent bidding regime should depend on whether the auction was competitive as measured by the “eligibility ratio” established once applications are filed and upfront payments are made.<sup>2</sup> It was suggested that this information be revealed at least three to four weeks prior to the auction. According to the T-Mobile/Peter Cramton proposal, if the eligibility ratio was 2 or above the auction would be fully transparent, whereas the auction would be non-transparent if the eligibility ratio was below 2.

The attendees discussed whether an eligibility ratio of 2 is the best threshold for a presumption of a competitive auction. Professor Cramton indicated that looking at past FCC auctions, an eligibility ratio of 2 is an excellent indicator of robust competition. Such a threshold indicates that most of the FCC’s major auctions were indeed competitive. For example, under this measure, for the major broadband auctions, Auction No. 4 (PCS A and B blocks, eligibility ratio = 1.93) was nearly competitive; Auction No. 5 (PCS C block, eligibility ratio = 6.72) was intensely competitive; Auction No. 11 (PCS D, E and F blocks, eligibility ratio = 1.65) was not

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<sup>1</sup> See Letter from Tom Sugrue et al., T-Mobile, to Marlene Dortch, Secretary, FCC, AU Docket No. 06-30 (Mar. 3, 2006).

<sup>2</sup> The eligibility ratio is calculated from the sum of the upfront payments. Thus, it is known by the FCC at the upfront payment deadline, typically about three weeks before the auction is to start. Each upfront payment gives the bidder its initial eligibility in MHz-pops. The eligibility ratio is total eligibility, summing over all bidders, divided by the total MHz-pops being sold in the auction. An eligibility ratio of 2 means that there is twice as much demand as the available supply.

competitive; and Auction No. 58 (PCS mainly C and F blocks, eligibility ratio = 2.94) was highly competitive. A threshold of 2 is also consistent with eligibility ratios observed in other auctions, which are viewed as competitive. For example, U.S. Treasury auctions typically have an eligibility ratio of about 2.

The attendees also discussed the limitations of such an approach. The FCC might be concerned that a large bidder would strategically increase its upfront payment substantially for the sole purpose of increasing the likelihood that the auction is declared competitive. Professor Cramton suggested that a solution to this problem is to cap the amount of eligibility attributable to any bidder for the purpose of this competition calculation at 50 percent of the total offering.<sup>3</sup> For example, if each of the four largest carriers made upfront payments covering 90 MHz of spectrum nationwide, the adjusted eligibility ratio would be 2, the same as if the largest bidders each put in an upfront payment to win 45 MHz nationwide. No bidder interested in 45 MHz of spectrum or more would have any strategic incentive to manipulate its upfront payment. Professor Cramton also explained that with this rule, a smaller bidder (someone not interested in 45 MHz or more nationwide) might have an incentive to make a larger upfront payment than it otherwise would if it valued full transparency. He added, however, that the incentive for a small bidder to make a larger upfront payment for strategic reasons would be reduced by capital constraints and the limited chance that its action would have any impact.

Another question raised was whether the threshold calculation should also include the number of bidders participating, in addition to the eligibility ratio. For example, if the four largest carriers each deposited upfront payments covering at least 45 MHz nationwide, but no other bidders participated in the auction, then the eligibility ratio still would be 2. Some might view this outcome as less competitive than if there were a number of other bidders competing as well. To account for this, Professor Cramton suggested that the FCC could use a simple table that requires a larger threshold eligibility ratio when there are only a few bidders but falls to 2 as the number of bidders increase. Professor Cramton suggested that under such an approach the FCC only include bidders that have applied for and made upfront payments for more than one percent of the available spectrum in “MHz-pop” terms to ensure significant competitive impact. The following suggested table was discussed:

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<sup>3</sup> The cap of 50 percent is only for the purpose of calculating the threshold ratio to determine competition and is not a cap on the upfront payment or on bidding.

<u>Adjusted Number of Bidders*</u>	<u>Adjusted Eligibility Ratio**</u>
<6	infinity
6	3.0
7	2.9
8	2.8
9	2.7
10	2.6
11	2.5
12	2.4
13	2.3
14	2.2
15	2.1
>15	2.0

\* Adjusted number of bidders only includes bidders with eligibility > 1% of available spectrum.

\*\*Adjusted eligibility ratio is calculated with a cap of 50% eligibility for any bidder.

Professor Cramton indicated his view that in practice, the adjusted number of bidders would be unlikely to affect the threshold eligibility ratio, because it is extremely likely that there will be more than 15 bidders. In these circumstances, the adjusted eligibility ratio and not the number of bidders *should* be the critical factor in determining whether the auction is competitive. Nevertheless, the table above would address the theoretically possible, if practically unlikely, scenario that the auction could achieve an eligibility ratio of 2 even with a small number of bidders.

A final concern was the possibility that although the auction overall may be competitive, there may be a large regional license that is not competitive, because only two or fewer bidders have enough eligibility to bid on the large license. Professor Cramton suggested that if for each of the Regional Economic Area Grouping (REAG) licenses, the number of eligible bidders (*i.e.*, bidders who have applied for the licenses and deposited sufficient upfront payments) is equal to 3 or more, then the auction should be deemed competitive. For simplicity, it was suggested to limit this calculation to the largest REAG license. This simple rule effectively guarantees that if there are 3 or more bidders for the largest REAG license, then the auction will have 3 or more bidders for each of the smaller licenses, because eligibility is fungible across licenses.<sup>4</sup>

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<sup>4</sup> The only time this would not be the case is when nearly all of the large bidders limited their applications to specific licenses. Such behavior has never been observed in any prior spectrum auction. It is common for some of the small bidders to limit their applications in this way, but not for the large bidders.

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Although T-Mobile and Professor Cramton continue to believe that full transparency is the best policy, in the alternative, the attendees discussed establishing a competitive threshold for transparency that could include one or more of these options. As the auction becomes more competitive, there is a point where full transparency is clearly the best policy, and the above proposals provide an objective, straightforward means of assessing the competitiveness of the upcoming AWS auction so that the FCC can make a reasoned decision on whether to use transparent or blind bidding procedures.

Pursuant to section 1.1206(b) of the Commission's rules, an electronic copy of this letter is being filed.

Sincerely yours,

/s/ Thomas J. Sugrue

Vice President - Government Affairs  
T-Mobile USA, Inc.

/s/ Peter Cramton

Professor of Economics  
University of Maryland

cc: Leslie Marx  
Evan Kwerel  
Walter Strack  
James Schlichting